

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing 17-09-2004
(day/month/year)

Applicant's or agent's file reference
BP109276

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/FI 2004/000274

International filing date (day/month/year)
06.05.2004

Priority date (day/month/year)
07.05.2003

International Patent Classification (IPC) or both national classification and IPC
C08B 37/00, A23L 1/10, A23L 1/308

Applicant
Suomen Viljava Oy et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

7. 5. 05

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/FI 2004/000274

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/FI 2004/000274

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	_____	YES
	Claims	1-3, 13-14	NO
Inventive step (IS)	Claims	_____	YES
	Claims	1-15	NO
Industrial applicability (IA)	Claims	_____	YES
	Claims	_____	NO

2. Citations and explanations:

Cited document:

D1:US6060519, (see column 2, line 38-60, column 3, line 22-41 and column 4, line 28-46)

D1 is related to a method for the separation of a hydrocolloidal composition from barley or oats. The method involves heat-shearing of the oat or barley substrate in aqueous slurry. The treatment results in disruption of the cellular structures of the cereals which leads to enhanced solubility of β -glucan.

Claims 1-3 comprises a method to improve the solubility of non-starch polysaccharides in vegetable material. This is done by using mechanical energy to crush the material. The claimed method according to claim 1-3 is not novel in view of D1.

According to claims 4-12 the mechanical energy is generated by the joint effect of heat, pressure and shearing forces. The claimed method is also defined by the vegetable material to be used. According to D1, (column 3, line 52-57) the mechanical energy is generated by dispersing, extruding, homogenisation or the like. D1 also shows that oat and barley, but also mixtures of rice, corn and soy are used. The invention, according to claims 4-12 differs from D1 in that there are no particle sizes and pressures mentioned in D1. But the problem and the method of achieving a solution, according to the invention, are known from D1. Since no unexpected, technical effect is achieved by using these particular parameter values we considerer them to be the choice of a skilled person. Claims 4-12 lack inventive step.

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